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WEB SERVICE AND OPERATION DESCRIPTION

MIK RESPONSE V1.0

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TABLE 1 DOCUMENT HISTORY

Version	When	Who	What
1.0	24/3/2011	Johan Philippe	Document setup
1.1	29/3/2011	Johan Philippe	Comment integration (context clarification)

Objective of this document

The aim of the service and operation description is to provide a detailed functional description.

The request and response messages, endpoints and authorization are described in the corresponding service message description document.

The complete functional package contains: Service Message Content, Service Error Codes, Service Test plans and service management documents.

Target group

This document is intended to be read by managers and analysts.

1 Introduction

This service ('MIK response') together with the 'MIK public' service provides the public access to MIK. MIK stands for 'Maritiem Informatie Kruispunt' which under the responsibility of FOD Mobility – Maritime Transport opens up access to ship location information. The information source for these locations (EMSA - European Maritime Safety Agency) is not free and MIK on the one hand consolidates the requests to EMSA and on the other hand also charges the end users for access to this information. MIK also consolidates the information from the two data sources that EMSA provides:

- LRIT: Long-Range Identification and Tracking
- SSN: SafeSeaNet

Information can be requested to MIK using a subscription model, whereby the consumer will at regular intervals receive the information on the ship(s) they are subscribed to. It is also possible to request ad hoc information. This can be a request for the latest information, or for a historical data set.

Requests to MIK to manage subscriptions and for ad hoc data are synchronous. The data resulting from these requests is always delivered asynchronously through the 'MIK response' service.

The MIK response service provides the means for the information to be asynchronously sent to the MIK consumers:

- Aggregated results for a specific period
- Negative result, signalling no information is available

This document handles the web services for forwarding ship location information a consumer requested.

Functionality	operation	Wsdl service name
Aggregated results for a specific period	AggregatedResultsResponse	MikLritSsnResponseService
Negative result	SignalNegativeResultResponse	MikLritSsnResponseService

For a clear understanding of some notions please check the reference documents listed in the appendix.

2 Service description

The MIK response service allows information to be sent to the MIK consumers.

The response service is hosted by the consumer and is the endpoint to where all results are sent. The LRIT and SSN provider services are asynchronous call back. Therefore the consumer response messages will be sent to this service asynchronously. The service will respond with a technical ack and will then try to send the message to the consumer provider service. For each consumer the service will try 3 times to send the message (with an intermediate delay of 3 minutes), before discarding the message and logging the error condition.

2.1 OPERATION AGGREGATEDRESULTSRESPONSE

All responses will be sent to the consumer on this operation, one position at a time. The soap header will contain the consumer Id. In the body will be an optional field for the subscription Id when the result is caused by a subscription. The AggregatedResultsResponse operation passes the information a consumer is subscribed to from MIK to the provider service of one of the consumers, e.g.:

- FOD Mobility
- Douane
- FOD Defence

The service checks the consumer Id and routes the message to the AggregatedLritPositionResponse operation of the appropriate provider service (FsbMikConsumerResponseService).

2.2 OPERATION SIGNALNEGATIVERESULTRESPONSE

The SignalNegativeResultResponse operation is very similar to the AggregatedResultsResponse operation, except that it uses the SignalNegativeResponse operation of the provider service instead of the AggregatedLritPositionResponse operation. This operation is synchronous.

This will contain a fsb:FaultType element. It contains a code and a functional description for the consumer.

3 Detailed Capability Scenario's

3.1 OPERATION AGGREGATEDRESULTSRESPONSE

Consumers have to implement a provider service that is able to receive the information coming from MIK to be forwarded to them by this service. Here we are forwarding the available information related to their subscription and/or request.

3.1.1 STANDARD SCENARIO

The consumer id identifies a known consumer.

The service forwards the message to the appropriate consumer provider service.

3.1.2 ALTERNATIVE SCENARIO INVALID CONSUMER ID

The consumer id identifies an unknown consumer or the consumer id can't be mapped to a known consumer provider service.

The service responds a Soap Fault.

3.1.3 ALTERNATIVE SCENARIO PROVIDER ERROR

The service will try to forward the message 3 times with 3 minute intervals for each consumer provider service.

If after the third attempt, the service was still not successful, the error condition will be logged and the delivery aborted.

3.2 OPERATION SIGNALNEGATIVERESULTRESPONSE

Consumers have to implement a provider service that is able to receive the information coming from MIK to be forwarded to them by this service. In this case we want to signal the absence of information related to their request.

3.2.1 STANDARD SCENARIO

The consumer id identifies a known consumer.

The service forwards the message to the appropriate consumer provider service.

3.2.2 ALTERNATIVE SCENARIO INVALID CONSUMER ID

The consumer id identifies an unknown consumer or the consumer id can't be mapped to a known consumer provider service.

The service responds a Soap Fault.

3.2.3 ALTERNATIVE SCENARIO PROVIDER ERROR

The service will try to forward the message 3 times with 3 minute intervals for each consumer provider service.

If after the third attempt, the service was still not successful, the error condition will be logged and the delivery aborted.

Appendix

REFERENCE DOCUMENTS

For more details the references provided by FOD Mobility have to be consulted.

Description	Dutch reference	French reference	English reference
Functioneel Ontwerp MIK knooppunt	Project_LRIT_MIK_Knooppunt_FSB_RFC_preparation.pdf		
FSB RFC preparation Project LRIT MIK			Project_LRIT_MIK_Knooppunt_FSB_RFC_preparation.pdf
EMSA information			http://www.emsa.europa.eu/

Remark: the references in the table above are the current available versions and may change